

We are here today, not to rubber stamp a policy that has been aggressively promoted by the crumb rubber industry, an industry that stands to make or lose millions as a result of your decision, but to consider the pros and cons of making a decision that could become a life or death matter to the children who will use the fields. There are many things we don't know about crumb rubber, but there are also a number of things that we DO know, things that are undisputed:

1. Crumb rubber contains many known carcinogens, toxins and irritants. In a study on the components of crumb rubber, Dr. Gaboury Benoit, a Yale University professor of environmental chemistry and engineering, found 96 chemicals in 14 crumb rubber samples. Of the 96 chemicals detected, 47 chemicals (49 percent) had no toxicity assessments done on them for their health effects. Of the 96 chemicals detected, 49 chemicals (51 percent) have had some toxicity testing done, but even many of those had incomplete toxicity testing and therefore all health effects are not fully known. Of the 49 chemicals tested, 10 or 20 percent are probable carcinogens.
2. The Connecticut Agricultural Experiment Station report on crumb rubber found out-gassing and leaching from synthetic turf rubber crumbs under aqueous ambient temperatures. Several compounds were present, but four compounds gave the highest responses on GC/Mass spectrographic analysis. The four compounds **conclusively identified with confirmatory tests were:** benzothiazole; butylated hydroxyanisole; n-hexadecane; and 4-(t-octyl) phenol. Approximately two dozen other chemicals were indicated at lower levels. These chemicals were released in laboratory conditions that closely approximate ambient conditions.
3. The World Health Organization's IARC (International Agency for Research on Cancer) is the world's leading authority on classification of carcinogens. Crumb Rubber contains several toxins classified by IARC in Group 1, its top rating, reserved for only the most dangerous carcinogens that have been **definitely** proven to cause cancer.
4. Another compound in crumb rubber that is hardly talked about is carbon black. Carbon black is the black dust that gets all over you when you come in contact with it. It is well known that about 20 to 30% of carbon black is comprised of nanoparticles. Nanoparticles are microscopic particles that are pulled to lengthen them in order to strengthen tires. Nanotubes, as they are then known, are similar to asbestos fibers, which have been shown to cause mesothelioma, a deadly cancer of the membrane lining the body's internal organs, particularly the lungs, and CAN TAKE 30 TO 40 YEARS TO APPEAR FOLLOWING EXPOSURE. A study by the Queen's Medical Research Institute at the University of Edinburgh/MRC Center for Inflammation Research in Scotland, showed that long, needle thin carbon nanotubes could lead to lung cancer, and inhaling carbon nanotubes could be as harmful as breathing asbestos.

Carbon black has been classified as a carcinogen since 2003 by the State of California.

Studies done on mice have found “asbestos-like pathogenicity”

Yes, the black dust that flies into the air when a goalie slides may contain nano-sized carcinogenic carbon black dust particles sprinkled with heavy metals. These nanoparticles remain suspended in the air for WEEKS.

Can the turf companies now assure us crumb rubber is safe?

5. Crumb rubber is classified as HAZARDOUS WASTE. It can't be disposed of with regular trash. It takes special handling. Toxins leach out of it. In Hamden a few weeks ago there was a hearing before the Inland Wetlands Commission to determine whether the proposed crumb rubber field would have negative impact on the wetlands. When artificial turf needs renovating there is a hidden cost of disposal. This could total \$130,000 or more plus transportation and landfill charges.

There is question whether crumb rubber is the cause of the cancers that have been reported by Amy Griffin, BUT THERE IS NO QUESTION THAT THE RATIO OF LEUKEMIAS TO LYMPHOMAS IS THE EXACT OPPOSITE OF THE NATIONAL RATIO IN THAT AGE GROUP. According to *David R Brown Sc.D., a public health toxicologist and Director of Public Health Toxicology for Environment and Human Health, Inc..* such a reverse in the pattern of cancers present is considered a signal that an active chemical carcinogen is present.

6. And why is the ratio of cancer in soccer goalies to field players 15:1? Who rolls around most in rubber crumbs?

When you view a youtube video of workers laying a crumb rubber field THEY ARE WEARING GAS MASKS!!!! Maybe our athletes should follow suit and wear gas masks as well.

One advantage of a crumb rubber field is that NOTHING GROWS ON IT!!! Imagine, weeds grow everywhere....but not on crumb rubber.

Environmentally it takes the planting of between 1800 and 3400 trees to offset the net carbon loss of the installation of a crumb rubber field.

According to Dr. David Brown, Given the high stakes, it is prudent to take action to protect children from this known hazard rather than wait for definitive evidence of harm. For the above reasons I urge you to take action today to ban the use of crumb rubber in the state of Connecticut.

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